

Pest Update (August 19-26, 2009)

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Available on the net at:

<http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm>.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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E-samples



Melampsora leaf rust is occurring on cottonwoods throughout the eastern half of the state. This is an annual occurrence with many cottonwoods, particularly the hybrids, and the loss of the lower leaves by late summer is a common symptom for this disease. Sometimes

all that is left of the canopies by early September are tufts of leaves at the tips of the branches. The most common indicators of the disease are the orange-yellow pustules on the leaves. There are a couple of other leaf diseases that have similar symptoms so it is important to identify them correctly. Marssonina leaf spot, another leaf disease of cottonwoods and poplars, results in dark brown spots or blotches on the leaves and premature defoliation. Poplar mosaic virus causes chlorotic spots to form on the leaves and often these leaves are stunted and distorted. There are no chemical treatments for these diseases.



The apple mealybug has been a problem on hedge cotoneaster this year. The apple mealybug (*Phenacoccus aceris*) can be found on cotoneasters, lindens, maples, mountainash and, of course, apples and crabapples. The insect is easy to identify by its white, waxy covering and it typically found feeding on the youngest shoots, often at the base of a leaf.

Trees and shrubs infested with this insect show symptoms of leaves yellowing and falling prematurely. These leaves and twigs are usually “sticky” due to the honeydew excreted by the mealybugs as they feed. This insect is easily controlled with an application of an insecticide containing acephate when they are first noticed.

Samples received

Beadle County (extension)

What is causing these needles to brown and drop on this blue spruce?

There was a lot of evidence of spruce spider mite activity on this sample! I will be posting controls for spruce spider mite on next week's *Update*.

Beadle County (extension)

Please identify these plants and describe their benefits.

Sample #1, growing by the garage, is a mulberry tree (*Morus alba*). These can be nice fruit trees, some folks like the raspberry-like fruit, but if they do not want to eat the fruit, the birds will take it.

Sample #2 is common hackberry (*Celtis occidentalis*). Hackberries are noted for their fast growth and ability to become a tall (50-foot plus) shade tree.

Sample #3 is Tatarian honeysuckle (*Lonicera tatarica*). This is a common shrub as the birds “plant” the seeds just about everywhere. Some folks still plant it as honeysuckles are tough plants though it is bothered by the honeysuckle aphid.

Beadle County (extension)

What is wrong with this Autumn Blaze maple?

I am seeing more chlorosis on this plant this year. The chlorosis is due to an iron deficiency brought about because of the insolubility of iron in an alkaline soils. Usually we do not see much of a problem with chlorosis on the Freeman maples such as Autumn Blaze but the frequent rains may have saturated the

soils and limited root growth. Hopefully this problem will not appear again next year but other than adding an iron chelate fertilizer or implanting iron directly in the trunk (sold as Medicap FE) there is not much that can be done about the problem.

Campbell County (extension) **What is wrong with this branch on a black ash? Also enclosed is a branch from a declining spruce tree.**

The black ash branch and the attached photographs show symptoms commonly associated with herbicide drift. The leaf cupping, curling and distortions are often seen with applications of 2,4-D. It might not be the property owner who sprayed as the drift can travel several yards and still cause problems.

The blue spruce sample showed extensive activity by the spruce spider mite and probably warrants control this fall. Control recommendation will be in the next *Update* as we are quickly approaching the time period for treating these mites.

As to your question on sprouts, only certain tree species typically send up sprouts or shoots in a yard. The worst is probably the white poplar (*Populus alba*), a tree that can turn a lawn into a forest. There is really no good (or easy) control of sprouts other than just continuing to mow them off. Removing the mother tree often results in a proliferation of new shoots but these will usually deteriorate with continued mowing.

Campbell County (extension) **What is the problem with this declining apple tree?**

The tree is infected with the bacterial disease called fireblight. This disease will result in branch dieback (with the leaves often staying attached but becoming wilted and brown to black). The disease may affect on a few branches or the entire tree. I suggest pruning off the infected branches at least 10-inches beyond any symptoms but still make a proper pruning cut at the junction where the branch is connected to the trunk. They should also spray down the pruners or saw with Lysol Disinfectant between cuts to reduce the chance of spreading the infection.

Davison County (extension) **What is wrong with this chokecherry? Also what might be the problem with this cottonwood? They were wondering if it was chemical drift.**

The common chokeberry leaves are infected with blumeriella leaf spot disease often referred to as cherry leaf spot and caused by the fungus *Blumeriella jaapii* (formerly *Coccomyces*). This is a common disease of *Prunus* that results in yellowing leaves that have dark purple to reddish brown spots. These spots often drop out leaving the leaves with a "shot hole" appearance. Shot holes are not in themselves signs of the disease as there are a host of other problems that can cause them. The disease is most often managed by raking up and destroying the fallen, infected leaves and pruning away dead shoots. Fungicides containing chlorothalonil can be applied beginning as the leaf

expands and continuing with three more applications spaced about two weeks apart.

The cottonwood leaves are infected with melampsora rust; see above under E-samples for more information on this disease. There were no symptom on the leaves that would indicator herbicide as a possible agent.

Dewey County (extension)

This black walnut has pale, curled leaves, what might be the problem?

The symptoms are due to an aphid infestation. Aphids are sap-sucking insects that produce honeydew, a sticky substance, as they feed. This material is often colonized by sooty mold, a black fungus. The easiest control for aphids is a soil drench of a product containing imidacloprid, such as Bayer Advanced Tree and Shrub Insect Control applied this fall. The pesticide will kill the insects as they feed NEXT year.

Haakon/Jackson Counties (extension)

Please identify this tree.

It is a littleleaf linden (*Tilia cordata*) that probably will not be happy in Philip as this tree does best in a milder climate.

Hamlin County (extension)

What is causing these holes to appear in the cherry leaves?

This is blumeriella leaf spot. See the Davison sample in this section for more information on this disease.

Lyman County (extension)

What is wrong with these cedars (junipers)?

I did find some phomopsis twig blight on the sample but this is primarily a shoot disease and does not explain why entire trees are dying as seen in the pictures provided. When the complete tree dies usually the problem is found in the lower trunk or root system. I'll be driving through the county next week and can stop and inspect them further.

Walworth County (extension)

What is wrong with this weeping caragana? The branches are all black and it is seeping a black substance on the ground beneath it.

The problem is aphids. The folds in the leaflets submitted as a sample were filled with them and their debris. Aphids are sap-sucking insects that produce honeydew, a sticky substance, as they feed. This material is often colonized by sooty mold, a black fungus. The easiest control for aphids is a soil drench of a product containing imidacloprid, such as Bayer Advanced Tree and Shrub Insect Control applied this fall. The pesticide will kill the insects as they feed NEXT year.